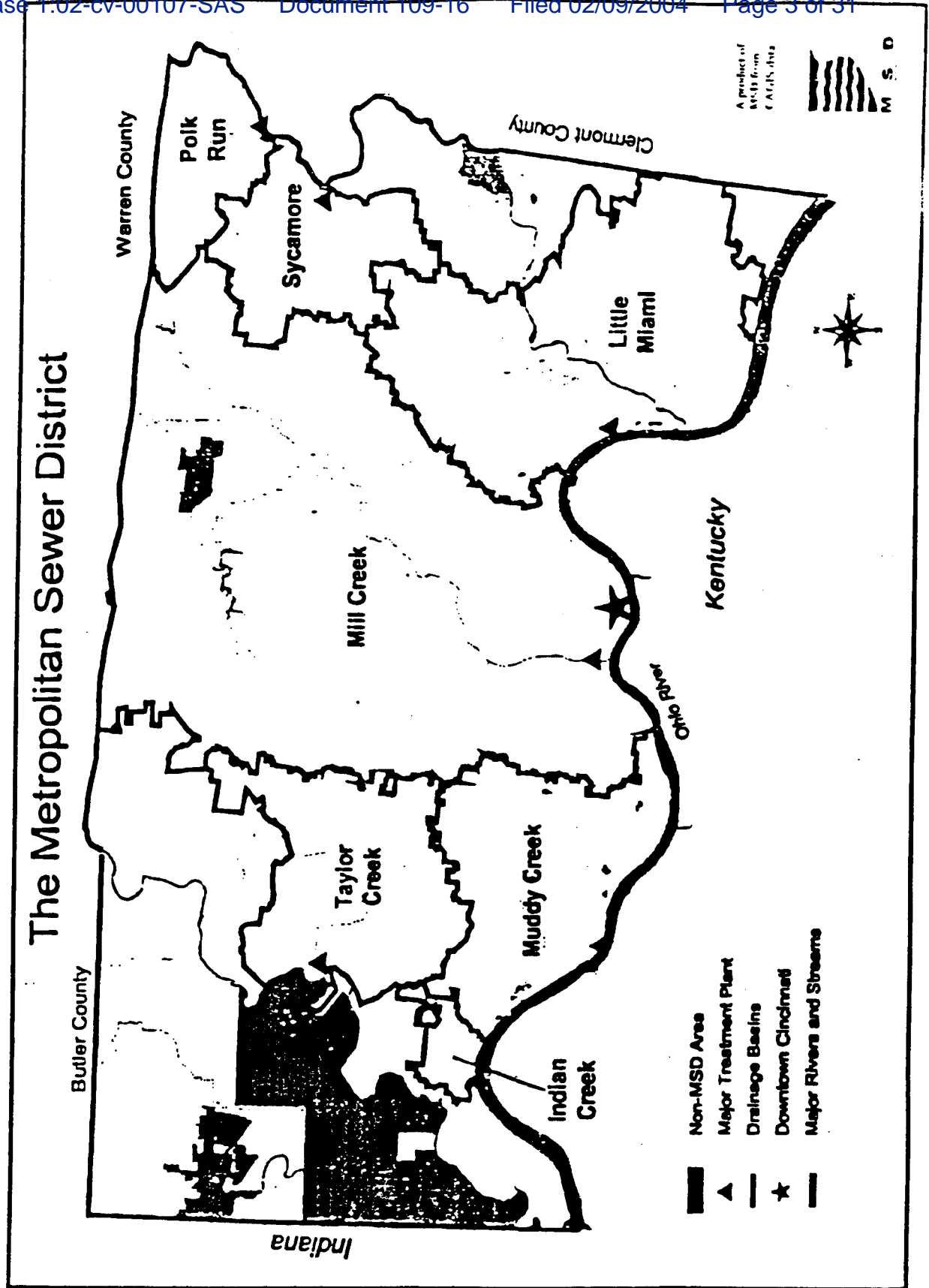


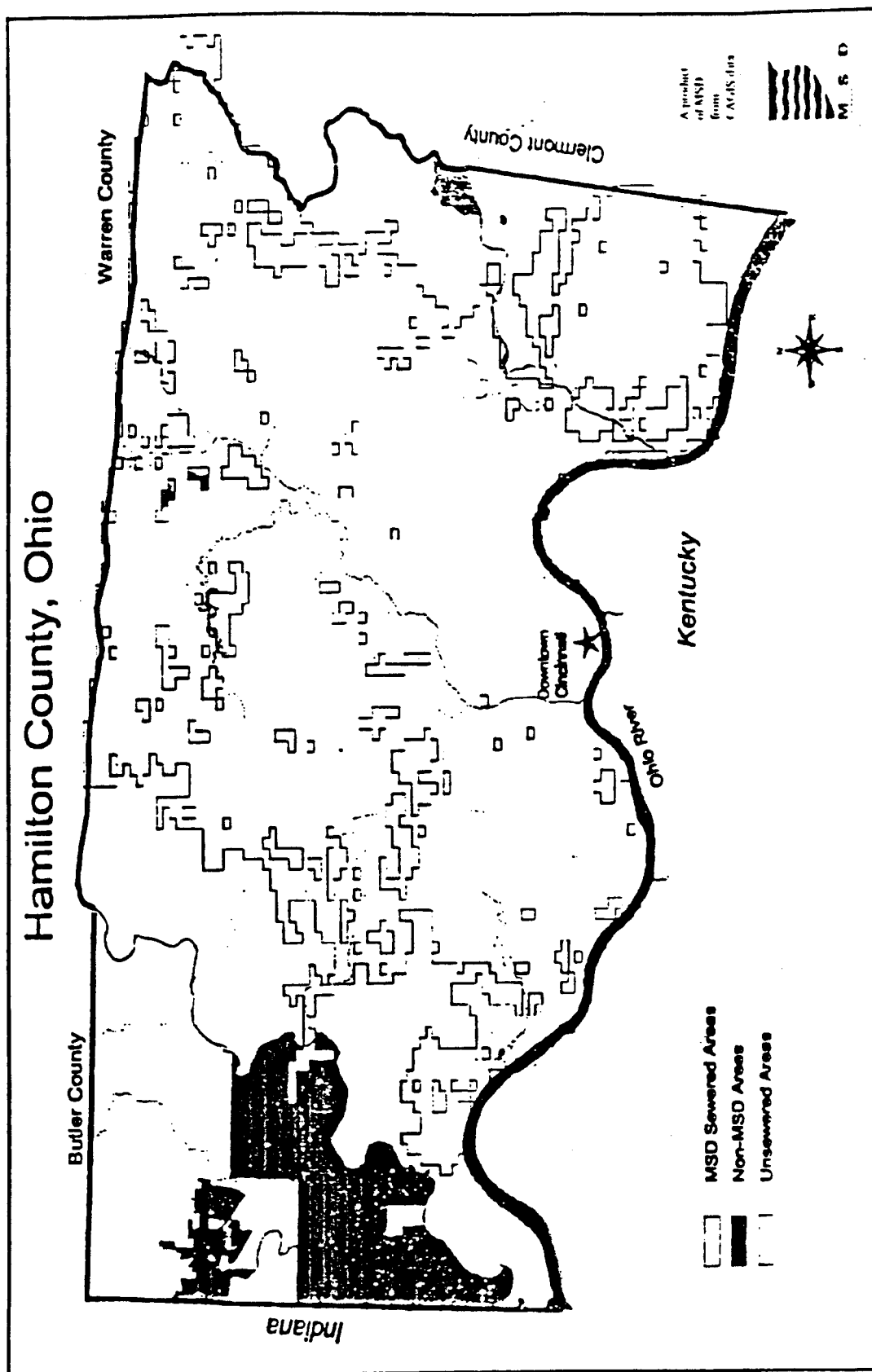
# **EXHIBIT 14**

**2 of 4**

the computer model will enable MSD to understand its existing sewer system by accurately simulating the response to the system to varying ground water and weather conditions. The modeling tool should be very useful to MSD to better plan for future scenarios, including expansions and improvements to the system. The model should be helpful in optimizing the system's performance and, thus, be an important component of on-going environmental regulatory compliance. The total cost of the project is expected to be approximately \$10,500,000. The development and final review of the model should be complete by this summer, 2003. Upon completion of the model, MSD will use the model to assess the condition of the sewer system and identify needed improvements with a goal of optimizing the operation of the system under various, anticipated weather conditions.

A map of the service area is displayed on the following page. The approximate geographic area serviced by each of the seven major operating wastewater treatment plants is shown on the map. Various other portions of Hamilton County are not sewered, including portions of eastern Hamilton County adjacent to Clermont County. A map of sewered and unsewered areas follows.





## Treatment Plants

The major treatment plants currently have an aggregate design, dry weather capacity through primary and secondary treatment of 206 million gallons per day and during 2002 treated an average 201 million gallons per day. Nearly 73 billion gallons of wastewater were treated in 2002. The largest plant operated by MSD is the Mill Creek Wastewater Treatment Plant. In addition, MSD operates six other major treatment plants – Little Miami, Indian Creek, Muddy Creek, Sycamore, Polk Run and Taylor Creek.

The sewage treatment facilities are maintained and operated by state certified operators. A detailed training program is in effect to assist plant operators in preparation for the state certification examinations. Separate programs are also in effect for maintenance and safety. Generally, the contracts for the purchase of major equipment require the manufacturer to provide extensive training to the operation and maintenance supervisors who operate and maintain the equipment.

Certain key facts concerning the major treatment plants and their recent operations can be summarized as follows:

### MSD TREATMENT PLANTS

<u>Plant</u>	<u>Year First Placed in Service</u>	<u>Design Capacity (mgd) through both Primary and Secondary Treatment</u>
Mill Creek	1959	130.0 <sup>1</sup>
Little Miami	1953	38.0
Muddy Creek	1961	15.0
Sycamore	1958	10.0
Polk Run	1970	6.0
Taylor Creek	1997	5.5
Indian Creek (as a major plant)	1995	1.5

<sup>1</sup> The Mill Creek Plant has a wet weather hydraulic capacity of 360 mgd through primary and 240 mgd through secondary.

### MSD TREATMENT PLANTS 2002 Flow Report

<u>Plant</u>	<u>Total Flow MG</u>	<u>Daily Average Flow MGD</u>	<u>Total Tons BOD/CBOD Removed</u>	<u>Avg. Tons BOD/CBOD Removed Per Day</u>	<u>Total Tons Suspended Solids Removed</u>	<u>Avg. Tons Suspended Solids Removed Per Day</u>
Mill Creek	52,526	144	33,895	93	37,899	104
Little Miami	7,742	27	3,696	10	6,527	18
Muddy Creek	5,731	16	1,270	3	1,184	3
Sycamore	2,641	7	910	2	1,771	5
Polk Run	1,810	5	469	1	657	2
Taylor Creek	614	2	421	1	488	1
Indian Creek	147	0.4	49	0.1	58	0.2
All Plants	73,211	201	40,710	111	48,584	133

The Mill Creek Wastewater Treatment Plant serves a large drainage basin of approximately 139 square miles including the industrialized Mill Creek Valley and the Cincinnati downtown business district. In addition to servicing the major industrial areas, it serves a population in excess of 400,000. Many of the sewers within this drainage basin are combined sewers conveying both sanitary waste and stormwater. The Mill Creek Wastewater Treatment Plant currently treats approximately 72% of total treated flow of the Sewer System.

The original Mill Creek Wastewater Treatment Plant was dedicated in 1959 and provided primary treatment of sewage and industrial wastewater. The plant has been upgraded and expanded several times principally as a portion of large scale construction projects commenced in 1972, 1985 and 1986. Most of the construction commenced in 1985 and 1986 was the result of a 1985 Consent Order (See "Environmental Compliance and Quality - Mill Creek Wastewater Treatment Plant and Combined Sewer Overflows") and all construction mandated by the Consent Order is completed.

The remaining major treatment plants, and to the extent necessary, the smaller treatment plants have been upgraded or improved during the last ten years.

The Little Miami Wastewater Treatment Plant is located adjacent to Lunken Airport in Cincinnati and serves the eastern part of Cincinnati and Hamilton County. The service area is approximately 56 square miles with an estimated population of 154,000. In 2002, the flow through the Plant averaged 27 mgd or approximately 13% of total treated flow of the Sewer System.

The Muddy Creek Wastewater Treatment Plant is located in Saylor Park, a residential area at the western edge of the City of Cincinnati and serves a portion of the western part of the City and Hamilton County. The service area is approximately 25 square miles with an estimated population of 85,000. The Muddy Creek Plant treated an average of 16 mgd or approximately 8% of total treated flow of the Sewer System in 2002. The original facility was expanded and upgraded to its current capacity in 1973.

The Sycamore Wastewater Treatment Plant is located on Sycamore Creek approximately one quarter of a mile from its confluence with the Little Miami River. The current service area is 19 square miles and is estimated to serve a population of 28,000. The Sycamore Wastewater Treatment Plant currently treats an average flow of 7 mgd or approximately 4% of total treated flow of the Sewer System. Although originally placed in service in 1958, the plant was substantially upgraded and expanded in 1972 and again during the period from 1987 to 1989.

The Polk Run Wastewater Treatment Plant became part of the system on March 1, 1985, when the City of Loveland joined MSD. The plant currently treats an average flow of 5 mgd or approximately 2.5% of the total treated flow of the Sewer System. The service area consists of approximately 14 square miles including small portions of Warren and Clermont Counties and serves a population of approximately 28,000. The original plant was placed in service in 1970 and was expanded in 1988 to treat a design flow of 6 mgd, and is currently being expanded to increase the design capacity to 8 mgd.

Pursuant to the 1988 Taylor Creek Consent Order, MSD has constructed the Taylor Creek treatment plant to serve the Taylor Creek drainage basin in western Hamilton County. The project was planned to eliminate at least fourteen small package treatment plants operated by MSD which were under orders to be upgraded to meet more stringent effluent requirements, when the Taylor Creek Plan was fully operational. The plant which first handled flow in 1997, is now fully operational. To date twelve of these small package treatment plants have been eliminated. The drainage basin serviced by the Taylor Creek plant contains significant amounts of unsewered, undeveloped land and for this reason, the Taylor Creek plant is a major component facility in the implementation of the QUEST Plan. The new plant has a rated

capacity of 5.5 mgd with an average flow of approximately 1.75 mgd in 2002, which will increase if and as the population of the service area increases and more area is sewered.

The Indian Creek Wastewater Treatment Plant was built by the Village of Cleves in 1976 plant was transferred to MSD in 1982 and was upgraded in 1995. The Indian Creek Wastewater Treatment serves the Hooven, Cleves and North Bend areas and in 2002 treated an average of .4 mgd.

The MSD operates a number of smaller extended aeration wastewater treatment plants, 133 package lift stations and 6 major pumping stations located throughout Hamilton County. The smaller wastewater treatment plants serve residential subdivisions with a minor amount of flow from commercial establishments and range in capacity from 11,000 to 600,000 gallons per day.

### Plant Performance

The flow to the Mill Creek, Little Miami and Muddy Creek wastewater treatment plants (which treat approximately 93% of total treated flow of the Sewer System) comes through combined and sanitary sewers and thus is subject to wide variations during wet weather. The amount of wet weather flow has a major effect on the quality of effluent being discharged into the Ohio River. In wet weather not only are there more combined sewer overflows which bypass the treatment system entirely, but the performance of the plants also tends to be reduced, thus lowering effluent quality.

Each major treatment plant's average performance during 2002 as reported by MSD and filed with applicable regulatory authorities is summarized as follows:

Plant	SUSPENDED SOLIDS DATA <sup>(1)</sup>		BOD/CBOD <sup>(1)</sup>		TOTAL KJELDAHL <sup>(1)</sup> NITROGEN		FECAL COLIFORM <sup>(2)(3)</sup>		
	NPDES Permit Limits <sup>(2)</sup>	Monthly Average Results	NPDES Permit Limits <sup>(2)</sup>	Monthly Average Results	NPDES Permit Limits <sup>(2)</sup>	Monthly Average Results	NPDES Permit Limits <sup>(2)</sup>	Mo Ave Results	
Mill Creek	30	13	25	6	None	15	200(S)	1000(W)	26
Little Miami	30	7	25	5	None	2	200(S)	1000(W)	15
Muddy Creek	23	3	16	3	None	2	200(S)	1000(W)	16
Sycamore	20	7	15	3	None	2	1000(S)	—	10
Polk Run	12	3	8	2	None	2	1000(S)	—	26
Indian Creek	17	2	14	2	None	—	200(S)	1000(W)	7
Taylor Creek	20	3	16	2	None	—	1000(S)	—	26

<sup>(1)</sup> Values are in milligrams per liter.

<sup>(2)</sup> NPDES permit limitations are the 30 day average limits. Limits designated by (S) are applicable only in summer months (May through October) and limits designated by (W) are applicable only in winter months (November through April).

<sup>(3)</sup> Applicable at the Sycamore, Polk Run Plants, and Taylor Creek Plants only during warm weather.

<sup>(4)</sup> All fecal coliform data is stated in geometric means.

MSD is a member of the Association of Metropolitan Sewage Agencies (AMSA). In the last ten years, AMSA has awarded the MSD treatment plants with a number of awards. Gold Awards symbolizing zero NPDES permit violations during the year were awarded to the Mill Creek Wastewater Treatment Plant for 1999, the Polk Run Plant for 1993, 1994 and 1996, the Sycamore Plant for 1994, 1995 and 2002, the Muddy Creek Plant for 2002, the Little Miami Plant for 2001, and the Taylor Creek Plant for 1998, 1999, 2000, 2001 and 2002. Additionally, AMSA Silver Awards for less than five NPDES violations were given to Mill Creek Wastewater Treatment Plant for 2001, the Polk Run Plant for 1997, 2000 and 2002, the Little Miami Plant for 1993, 1995, 1996 and 1998, the Muddy Creek Plant for 1994 and 2000, the Polk Run Plant for 1997, 2000 and 2002, the Sycamore Plant for 1993 and 2000.

the Taylor Creek Plant for 1997. In addition, the Sycamore Plant received the National Safety Award from the Water Environment Federation for 2000 and the Little Miami Plant for 2001.

### **Collection System**

MSD considers the overall condition of the sewer lines to be satisfactory. Although the City of Cincinnati is a relatively old municipality, sewer lines serving a majority of the population, particularly sewer lines existing outside the older areas of Cincinnati, have a median age of less than 35 years. Based on its experience, management of MSD believes that factors such as the general quality of construction and installation and external factors such as location, depth and traffic impact, rather than age, are the largest determinants of long term sewer condition. Accordingly, as a policy matter, MSD replaces and rehabilitates existing sewer lines based on known data such as television and visual inspection reports, evidence of excess inflow or infiltration and other matters rather than on the basis of age.

MSD conducts an ongoing inspection, maintenance and rehabilitation program. Since 1987, MSD has had an aggressive program of rehabilitating sewers by use of trenchless and shotcrete technology. During 2002, approximately 300 miles of sewers were inspected, and 320 miles were cleaned. Approximately 12.7 miles of sewer lines were rehabilitated using trenchless and shotcrete technology costing approximately \$3,545,000. MSD intends to spend approximately \$6,500,000 on this technology each year for the foreseeable future. In addition to the awards relating to plant performance, in 2001 the North American Society for Trenchless Technology recognized MSD for its significant contributions to the industry.

During the years prior to 1991, the primary emphasis in the Capital Improvements Program was on improving and upgrading the capacity of the wastewater treatment plants. While this is an ongoing process, the primary focus of the Capital Improvements Programs since the early 1990s shifted to the collection system. For the foreseeable future, it is anticipated that the largest portion of the Capital Improvement Programs will continue to emphasize improving, rehabilitating and expanding the collections system, including elimination of sanitary sewer overflows, significant reduction in combined sewer overflows and expansion of the collection system.

### **Environmental Compliance and Quality**

#### **Overview**

MSD has expended and continues to expend significant moneys and resources to improve its treatment plants and collection systems to preserve and enhance water quality and comply with applicable environmental laws. Capital expenditures in excess of \$125,000,000 that were required for plant upgrades in connection with the 1985 Consent Order for the Mill Creek Treatment Plant have been completed. Over the past several years, MSD has expanded its environmental compliance and quality focus from upgrading its treatment plants to improving its collection system and developing and implementing plans to reduce and/or control sanitary sewer overflows ("SSOs") and combined sewer overflows ("CSOs"). In addition to the 1985 Consent Order, MSD, U. S. EPA and Ohio EPA have negotiated and entered into an Interim Partial Consent Decree, which addresses SSO issues. The Interim Partial Consent Decree must still be approved by the Federal District Court for the Southern District of Ohio. The Sierra Club has sued the City, the County and MSD in connection with MSD's SSOs and challenged the adequacy of the Interim Partial Consent Decree. Finally, MSD is currently negotiating with U. S. EPA, Ohio EPA and the Ohio River Sanitation Commission ("ORSANCO") regarding a follow-on consent decree that will address other wastewater collection and treatment issues, including CSOs. This follow-on or "Global" decree would also be subject to approval by the Federal District Court.



Mill Creek Wastewater Treatment Plant and 1985 Consent Order

Under the Clean Water Act ("CWA"), publicly-owned wastewater treatment works are required to limit the pollutants in their discharges ("effluent limitations"). Effluent limitations are designed to meet certain nationwide technology-based requirements (secondary treatment) as well as to maintain the water quality of streams into which treated sewage is discharged. Effluent limitations are monitored and regulated through a system which requires a permit to discharge effluent. This system is known as the National Pollutant Discharge Elimination System ("NPDES"). The U.S. EPA manages this permitting system except where individual states have received approval for state implemented plans. The U.S. EPA has delegated the NPDES program to Ohio.

The original Mill Creek Wastewater Treatment Plant was dedicated in June, 1959, and provided only primary treatment of sewage and industrial wastewater. After the enactment of the CWA, construction commenced in 1972 to upgrade the plant to meet the secondary treatment requirements imposed by that statute. Although the construction was designed to achieve secondary treatment requirements in compliance with the statute by July 1, 1977, for a variety of reasons beyond the reasonable control of MSD, the required equipment did not function properly. As a result of these equipment failures, the Mill Creek Wastewater Treatment Plant was unable to meet the final effluent limitations in its NPDES permit.

In March 1985, as a result of formal negotiation among the parties, the United States filed a civil action in the U.S. District Court, Southern District of Ohio, Western Division, against the State, the County, and the City alleging violations by MSD of its NPDES Permit for the Mill Creek Wastewater Treatment Plant. No other MSD treatment plant was included in the complaint. Simultaneous with the filing of the complaint, all the parties entered into a Consent Order (the "Federal Consent Order," "1985 Order" or "Order") as a means of achieving final settlement of the action.

The Federal Consent Order required, among other things, the City and the County to prepare a detailed plan of corrective measures to bring the Mill Creek Wastewater Treatment Plant into full compliance with the Clean Water Act and its NPDES Permit. The capital costs incurred in complying with the Federal Consent Order since 1985 exceed \$125,000,000 for work at the Mill Creek Wastewater Treatment Plant. Most of the funding for these projects was provided by the 1985 and 1986 Bonds and certain grants. MSD does not anticipate further significant capital expenditures at the Mill Creek Wastewater Treatment Plant under the Federal Consent Order. Over the past several years, MSD has shifted its environmental compliance and quality focus from upgrading its treatment plants to improving its collection system and developing and implementing plans to reduce and/or control SSOs and CSOs.

The Federal Consent Order sets forth stipulated penalties for failure to comply with its provisions, but no civil penalties were assessed for alleged violations occurring prior to the lodging of the Order. Penalties of \$1,000 to \$2,500 per day may be assessed for failure to meet deadlines for corrective measures required by the Order. Violations of interim or final effluent limitations may result in penalties of \$1,000 to \$10,000 per violation, with "violation" being defined as failure to meet a thirty-day or seven-day discharge limitation. Under the Order, U.S. EPA may exercise its discretion in seeking to collect penalties and must take into account MSD's good faith efforts to achieve compliance. In addition, the Order provides that violations caused by circumstances beyond the reasonable control of MSD shall be excused. The Order also required MSD to establish a \$750,000 environmental security account to be used for the implementation of environmentally beneficial projects. This MSD funded account was established and is managed by the County Administrator as the court-appointed trustee. As further discussed below, the parties have been unable to reach agreement on acceptable project(s) to be funded from this account, although this is the subject of the current global decree negotiations.

The Federal Consent Order provides that it will terminate one year after the City and County have achieved and maintained compliance with the effluent limitations in the NPDES Permit, provided that all other requirements of the Federal Consent Order have been met. Essential construction of the improvements required under the Order was completed by July of 1988, and secondary treatment at the plant became fully operational at that time. Although the Mill Creek Wastewater Treatment Plant performed generally well since it began operations, the plant had not met all the parameters of its permit at all times, and permit excursions have occurred for various reasons from time to time over the years (see table on page 24). In 2000, the Mill Creek Wastewater Treatment Plant completed a year without a single violation.

Beginning in 1989, U.S. EPA demanded payment of stipulated penalties for asserted violations of certain effluent limitations at the Mill Creek Wastewater Treatment Plant, and demanded payment of the fines. The City and the County argued (and continue to assert) that the vast majority of permit violations asserted by U. S. EPA were excursions due to circumstances beyond their reasonable control, and thus excusable under the Federal Consent Order.

In recent years, the topics discussed between the parties have focused on issues other than those specifically addressed in the 1985 Federal Consent Order. In addition to the issue of MSD's SSOs, U. S. EPA and the Justice Department clearly indicated their intent to negotiate a new consent decree to address CSOs and various other wastewater collection and treatment issues as well. The negotiations resulted in the Interim Partial Consent Decree for SSOs discussed below. It is clear that U.S. EPA and the Justice Department are intent on requiring a follow-on or "Global" consent decree that will address, among other things, an update to MSD's existing Long Term Control Plan for CSOs, implementation of MSD's SSO Capacity Assurance Program Plan, civil penalties for alleged treatment plant, CSO and SSO violations and termination of the 1985 Order, including implementation of environmental projects funded by the environmental security account established by the 1985 Order.

#### Background on MSD SSO Program

MSD operates a number of separate sanitary sewer systems that are subject to excessive infiltration and inflow of stormwater, which cause the affected sewers to discharge untreated sewage or other wastes directly into streams. These discharges are known as Sanitary Sewer Overflows ("SSOs"). In 1992, MSD established the Stormwater Removal Program (originally the Rainfall Derived Infiltration/Inflow Program), to identify and remove stormwater inflows from private property into sanitary sewers. The reduction in stormwater inflow substantially helps eliminate SSOs. Private property owners are reimbursed for 100% of their costs, up to \$3,000, incurred in the removal of unauthorized connections to the sanitary sewer system.

For some time, MSD has been working with the Ohio EPA to establish appropriate remedies for its SSOs, and since 1992 has been working under a formal Ohio EPA order. The process of designing and implementing solutions to these overflows is complex, time consuming and expensive. Perhaps the most difficult issue with the elimination of SSOs is how to define, from an engineering standpoint, when an SSO is eliminated. Since SSOs in MSD's System are primarily the result of stormwater infiltration and inflow, including in some cases overland flooding during storm events, the total elimination of all SSOs under all circumstances is probably impossible. Because these issues have been recognized as common to many sewer systems across the country, U.S. EPA has stated for several years that it intends to propose new SSO standards and regulations. Although draft SSO regulations were proposed by U.S. EPA in 2001, they were subsequently withdrawn by the Agency. At this point, it is not clear when such regulations will be proposed again.

In 1993, MSD submitted studies identifying SSO locations and plans for remedying certain of these SSOs. These plans were supplemented in 1994. Although MSD and Ohio EPA had been working for several years to address SSOs through the State regulatory process, Ohio EPA has now joined U.S. EPA and ORSANCO to address SSO issues through the Federal Interim Partial Consent I discussed below.

#### Interim Partial Consent Decree on SSOs and Sierra Club Litigation

U.S. EPA's focus on MSD's collection system issues is consistent with regulatory emphasis around the nation. The elimination of SSOs is a top MSD priority, with long term control strategies for CSOs also a very high priority. To that end, in February 2002, MSD, U.S. EPA, Ohio EPA and ORSANCO executed and agreed to enter into an Interim Partial Consent Decree on SSOs ("Interim Partial Consent Decree" or "Decree"). The Interim Partial Consent Decree was filed as part of a legal action initiated in federal court by the U.S. EPA and the Ohio EPA against the County and the City as the owner and operator respectively of MSD. The Interim Partial Consent Decree is still subject to approval by the court. After U.S. EPA lodged the Interim Partial Consent Decree with the court, the Sierra Club initiated a separate action against the County, the City and MSD alleging violations of the CWA associated with the SSOs from MSD's collection system. Eventually, this action was consolidated with the U.S. EPA and Ohio EPA action. The Sierra Club asserts that the Interim Partial Consent Decree is inadequate and seeks modifications to the Decree that the other parties, including U.S. EPA, OEPA and ORSANCO, oppose. The Court has stayed the Sierra Club litigation until at least the first week of September, 2003 when the City, the County, U.S. EPA, Ohio EPA and ORSANCO are due to report to the court regarding the status of the "Global" consent decree negotiations discussed below. During the pendency of this litigation, MSD has followed the Decree as if it has been entered.

#### Terms of the Interim Partial SSO Consent Decree

The Interim Partial Consent Decree sets forth various requirements and milestones with which MSD must comply. MSD anticipates that the costs associated with implementing the requirements contained in the Decree will be included in routine Capital Improvement Programs. In general, the timelines contained in the Decree address issues in the order of importance. The issues with which U.S. EPA and Ohio EPA have the most concern are required to be addressed in the short term rather than the long term. Other wet weather issues, including CSOs, are not covered by the terms of the Interim Partial Consent Decree because they will be resolved through later negotiations designed to find a global solution to all of MSD's CWA issues. The major topics covered by the Interim Partial Consent Decree are briefly described below.

#### Capital Improvement Projects

Under the Interim Partial Consent Decree, capital improvement projects ("CIPs") are required to address certain of MSD's "Most Highly Active" SSOs. "Most Highly Active SSOs" are locations where SSO discharges occur more frequently and with greater volume than at other locations. An appendix to the Interim Partial Consent Decree sets out specific CIPs to address 16 of MSD's Most Highly Active SSOs and individual schedules by which each project must be accomplished.

#### SSO 700 Remedial Measures

The Interim Partial Consent Decree also requires implementation of a series of remedial measures to address MSD's largest SSO – SSO 700. First, the Decree requires MSD to design and build a Chemically Enhanced High Rate Settling and Storage Facility ("CEHRS&S") to reduce contaminant loading from SSO 700. MSD is required to spend a minimum of \$10 million and up to \$15 million

design and implement this project. On April 14, 2003, U.S. EPA and OEPA approved MSD's CEHRS&S plan, which calls for an operational CEHRS&S to be built by July of 2007.

A plan to install permanent remedial measures to address SSO 700 must be submitted by December 31, 2009. One possible permanent remedy for SSO 700 mentioned in the Decree is construction of the Mill Creek Deep Tunnel (See "Mill Creek Deep Tunnel"). If construction of the Mill Creek Deep Tunnel is the selected course to address SSO 700, it must be constructed by December 31, 2016. If a method other than construction of the Mill Creek Deep Tunnel is selected, then construction must be completed by December 31, 2022. The permanent remedial measures plan must be approved by U.S. EPA and Ohio EPA.

#### Comprehensive SSO Remediation Program

In addition to specific issues related to SSO 700 and 16 of the Most Highly Active SSOs, the Interim Partial Consent Decree also requires implementation of Comprehensive SSO Remediation Program ("CSRP"). Under terms of the Decree, MSD is required to undertake a comprehensive program to evaluate and propose measures to rehabilitate the Sanitary Sewer System in order meet the objectives of the Interim Partial Consent Decree. The program will build upon the capital improvements mentioned above and is required to be implemented in phases. Implementation of this program should significantly contribute to the long term compliance of MSD facilities and systems. The components of the program will include data collection and modeling, analysis and assessment, and program development and implementation in an effort to develop a sanitary sewer system hydraulic model, a capacity assessment plan, a capacity assessment report, and a capacity assurance program plan.

#### Short-term Adequate Capacity

The Decree requires MSD to implement a short-term adequate capacity program plan ("STAC Plan"). The objective of the STAC Plan is to prevent wastewater flows from new development from contributing to the volume of wastewater discharged from downstream SSOs. The plan is designed to ensure that more flow is removed from the system than is added from proposed new sewers, sewer extensions, or other increases associated with new development. Compliance with this plan will be required for sub-basins until such time as the sub-basin remedial measures set forth in the Capacity Assurance Program Plan are met.

#### Stipulated Penalties

The Interim Partial Consent Decree sets forth stipulated penalties for failure to comply with its provisions, but no civil penalties for asserted violations occurring prior to the lodging of the order were assessed. Civil Penalties of \$1500 to \$5000 per day may be imposed for failure to comply with critical path submittals and critical remedial milestones as identified in the Decree. Civil Penalties for failure to comply with reporting requirement range from \$500 to \$1500 per day. Stipulated penalties for Sanitary Sewer Discharges ("SSD") and improper Sewer Connections range from \$3000 to \$5000 per day depending on the timing and cause of the violation. MSD will not be liable for any SSDs caused by a ten-year storm or greater. Stipulated penalties associated with the failure to meet report submittal deadlines and to comply with other requirements are \$2000 per day.

#### CSO Issues

With the Interim Partial Consent Decree in place, U.S. EPA, Ohio EPA and ORSANCO now seek to have the City and County enter into a consent decree that will address CSOs. MSD has devoted considerable resources to studying comprehensive, cost effective solutions to its CSOs and has begun a



series of capital improvement projects designed to remedy these discharges and comply with national policy on CSOs. (See "Long Range Environmental Planning" and "Capital Improvements Program").

Cincinnati, like many older cities in the Northeast and Midwest, has a combined sewer system. Combined sewer systems were based on technology and theories prevalent until the early to mid-1900's, that both sanitary waste and surface drainage or rain water could be handled jointly and safely discharged directly into streams and rivers. As the systems developed and these communities grew, interceptors were used to capture this discharge, bypass the small creeks or streams and discharge it directly into large rivers. Interceptor sewers now have their flow directed to wastewater treatment plants. Currently, combined sewer systems are designed so that during dry weather, an interceptor sewer captures the wastewater and conveys it to a treatment plant. During wet weather, because of the large inflow of stormwater, the combined wastewater and stormwater flow may exceed the capacity of the interceptor sewers resulting in an increased, but still less than complete, flow to the treatment plants, and the remainder discharging directly into creeks, channels or rivers. This discharge is commonly referred to as a combined sewer overflow or "CSO," and is part of the design of the system.

As is the case with SSOs, CSOs are also a national issue that has received increasing attention from the U.S. EPA. According to informal U.S. EPA estimates, approximately 1,100 communities centered primarily in the Northeast and Midwest regions experience CSOs.

In 1989, the U.S. EPA issued a CSO Control Strategy which has the following objectives: (i) to ensure that if CSO discharges occur, they are only as a result of wet weather; (ii) to bring all wet weather discharge points into compliance with the technology-based requirements of the Clean Water Act and applicable State water quality standards; and (iii) to minimize water quality, aquatic biota, and human health impacts from wet weather overflows.

In April, 1994, the U.S. EPA affirmed the general strategy and amplified its views through issuance of a Combined Sewer Overflow Policy ("CSO Policy"). The CSO Policy resulted in numerous meetings with environmental advocacy organizations, municipalities, regulatory authorities and various associations. The U.S. EPA indicated that it would exercise "enforcement discretion" in determining whether to seek civil penalties for past CSO violations from communities that have no dry weather CSOs and meet the objectives and schedules of the policy.

On December 21, 2000, Congress added Section 402(q)(1) to the Clean Water Act, which requires all permits, orders and decrees addressing CSOs issued after that date to conform with U.S. EPA's CSO Policy.

On July 31, 2001, U.S. EPA issued "Guidance: Coordinating CSO Long-Term Planning with Water Quality Standards Reviews". The goal of the guidance was to assist CSO communities in developing and implementing affordable and well-designed CSO programs that comply with water quality standards of the federal Clean Water Act.

The sewer system operated by MSD contains both sanitary and combined sewers. Approximately 40% of the collection system is combined sewers. As such, the history and many of the challenges of MSD in dealing with CSOs are typical of the 1,100 communities with combined sewers. However, the CSO problem of many communities along the Ohio River was exacerbated during the early and mid-1960's when the U.S. Army Corps of Engineers raised the level of the Ohio River measured at pool stage by approximately 13 feet. The higher river level caused many sewers to be submerged more frequently.

These issues have a relationship to the operation of the Mill Creek Treatment Plant. Essentially, during wet weather, stormwater causes extremely high flow rates that exceed the plant's design

secondary treatment capacity, resulting in overflows from the sewer system into the Mill Creek or the Ohio River. Because this flow receives primary treatment and is extremely diluted with rainwater, the Mill Creek Treatment Plant NPDES permit and the Consent Order recognize this phenomenon and the dramatic effect of stormwater on the sewer system, and presently permit bypassing of secondary treatment at the Mill Creek Plant under limited conditions during heavy wet weather flows. However, the Federal Consent Order has required MSD to maximize the amount of flow receiving treatment, to provide secondary treatment for all dry weather flows, and to provide maximum treatment of all flows during wet weather. With respect to CSOs in general, the Federal Consent Order predates and is more general than current U.S. EPA and Ohio EPA regulations and policies.

In addition to high flow rates in wet weather, the collection system has experienced a limited number of dry weather CSOs that occur during high water conditions in the Ohio River. MSD has developed various corrective actions to reduce those dry weather overflows including operation and maintenance modifications, construction of new sewers, repairs to existing interceptors and personnel training. MSD is proceeding to eliminate such dry weather, high water overflows. All remaining projects were included in the Five Year Capital Improvement Program. Due to other capital improvement projects affecting these unconstructed corrections, some of the work may not be required because the CSO can be addressed by other projects.

In response to CSO issues, MSD has been proactive in developing its CSO Strategy Development and Facilities Plan (known informally as MSD's "Long Term Control Plan" or "LTCP") to address public health and water quality concerns created by CSOs. The LTCP was developed in response to U.S. and Ohio EPA initiatives designed to grant local sewer authorities flexibility in creating innovative approaches to control CSOs. A total of 369 projects have been identified in the CSO Remediation Plan with an estimated aggregate cost of \$332,000,000 in 1995 dollars. The cost of implementing an updated LTCP pursuant to a "Global" consent decree could cost considerably more than that. The U.S. EPA's 1994 CSO Policy proposed a phased implementation of CSO controls, based upon, among other things, the financial capability of the sewer district. MSD is incorporating the costs of the CSO LTCP in the Capital Improvements Program on a project-by-project basis.

#### Current Discussions Concerning the Proposed "Global" Consent Decree

MSD continues to negotiate with U.S. EPA, Ohio EPA and ORSANCO toward a "Global" Consent Decree, which would focus on an enforceable schedule to address a variety of issues, including an update to the CSO LTCP, implementation of the SSO Capacity Assurance Program Plan, and any outstanding treatment plant issues. The Global Content Decree will likely also include civil penalties for alleged past violations. Neither the U.S. EPA nor Ohio EPA has attempted to collect penalties for alleged past violations of the CWA associated with MSD operations. The focus of the government agencies to date has been to correct any instances of non-compliance before assessing penalties for past violations. Of course, it is possible at any point during these negotiations that the parties may reach an impasse, at which time litigation by the governments against MSD would likely ensue. In any event, MSD has no indication at this time that any government entity will be seeking to levy penalties that would be so high as to affect MSD's ability to continue operation.

#### Other Environmental Regulatory Actions

MSD is a party to several other consent decrees and administrative findings and orders issued by the Ohio EPA. Additionally, from time to time, U.S. EPA or Ohio EPA will discuss potential violations of NPDES permits or other environment requirements relating to air or water quality. Currently, these requirements, consent orders, and findings and orders relate to SSOs and certain local, neighborhood-specific problems. Ongoing compliance with and the termination of these requirements is a subject of

discussion and negotiation with the U.S. EPA and Ohio EPA. MSD believes that it is in substantial compliance with these consent order requirements and will remain so in the future. While periodic failure to comply may result in fines and other costs, MSD does not anticipate that non-compliance with ongoing requirements will result in any material financial cost to MSD through fines. However, substantial capital improvements will be required, some of which are included in the five year Capital Improvements Program.

#### Long Range Environmental Planning

Generally, as recommended by U.S. EPA's CSO Policy, the projects with the highest impact are addressed in the early stages of the Plan. The CSO Remediation Plan was designed to meet the current nine minimum controls mandated by the U.S. EPA's CSO requirements in the short term, while MSD implements its longer term CSO control plan consistent with U.S. EPA and Ohio EPA policy. Based upon its discussions with the U.S. EPA, MSD believes that it is meeting the nine minimum controls currently. MSD is involved in discussions with U.S. EPA and Ohio EPA to ascertain what changes will need to be made to its LTCP.

The LTCP identified the CSO discharge points and analyzed the various alternative technologies available to remedy the problems. The evaluation process included a site-by-site evaluation of cost effectiveness based upon unit removal cost of related pollutants, volumes of flow, stream sensitivity and other significant criteria. The LTCP analyzed each CSO point separately and recommended an alternative to address each CSO. While the U.S. EPA, Ohio EPA and ORSANCO currently have the entire LTCP under review, many of the initial projects have already been approved and all are in various stages of implementation.

As part of the CSO Remediation Plan, MSD will monitor water quality. The results of this monitoring will guide the extent to which longer term controls must be implemented. The recently completed system-wide computer model should be a useful tool for MSD CSO remediation efforts. The CSOs were permitted for a five-year term which expired in 1997. An application for renewal was submitted in accordance with the regulations. The terms of the original permit continue in effect until the Ohio EPA takes action on the renewal request. A new permit is likely to issue after the current "Global" negotiations are complete.

#### QUEST Plan

MSD has prepared a comprehensive plan to provide wastewater management to the unsewered areas of the County. This plan, known as the Quality Upgrades for Effective Sewage Treatment Master Plan (QUEST), identifies the unsewered regions of the County and presents MSD's proposed network of trunk sewers, interceptors, treatment plants and the use of alternative technology to provide sewer service for both existing needs and future development. QUEST estimates that population of the County could increase significantly with a complete build-out of the unsewered areas. Through implementation of QUEST, MSD would provide trunk sewers to eliminate most of the estimated 17,000 on-site sanitary systems presently in use within the County and eliminate many existing but outdated package plants by connecting them to larger, more efficient treatment facilities. On-site systems, which include both septic tanks with leach fields and home aeration systems, have been the focus of environmental regulations due to actual and perceived public health problems caused by these on-site systems.

The QUEST Report estimates a total project cost of approximately \$214,119,000 in 1994 dollars. No definitive implementation period has been recommended or approved by either MSD or the County for implementation of QUEST. Implementation will be determined on a project by project basis consistent with the County's Capital Improvements process. Certain projects may be undertaken

conjunction with owners and/or developers. Based upon the approximate tap-in fee of \$2,500 for single family residences, at least \$4,000,000 a year in revenue can be raised annually and applied to QUEST construction projects. The number of tap-ins or potential tap-ins will be a factor in determining which QUEST projects will be developed and when they will be developed. Additional funding sources will be explored and evaluated if and when the need arises during the course of implementation of QUEST.

QUEST programs are included in the Capital Improvement Program and approximately \$16,925,000 of such projects are included in the 2003 Capital Improvement Plan.

#### Mill Creek Deep Tunnel

The US Army Corps of Engineers has been working on flood damage reduction projects along the Mill Creek since the 1970s. Currently, the Corps is in the process of completing a General Reevaluation Report (GRR) that will update the cost/benefit of the remaining work. As part of that effort, MSD has supplied preliminary design documents for the installation of a Deep Tunnel, approximately 300 feet below the creek bed. This tunnel would serve the dual purposes of flood damage reduction and CSO control. A decision on the tunnel has become a significant element in the final determination of a solution for SSO 700, as well as a factor in CSO planning.

The tunnel is estimated to be a project with a current estimated cost of approximately \$840,000,000 with a substantial portion of the funding coming from the federal government. The required local contribution might be incorporated into MSD's Capital Improvement Program, due to the utilization of the tunnel for CSO control. Any MSD contribution to the Deep Tunnel could be somewhat offset by elimination of planned CSO (and SSO 700) projects that would be unnecessary in light of a tunnel. The extent of such an offset, if any, has not yet been determined. No final determination regarding implementation of this project can be made until the GRR is completed (currently scheduled for the end of 2004) by the US Army Corps of Engineers.

#### **Capital Improvement Program**

##### Procedure to Establish

In order to make regularly scheduled repairs, replacements and improvements, to comply with the Clean Water Act generally, and to meet the specific requirements of various consent orders, the County annually adopts a capital improvements program. The capital improvement program of MSD is developed annually for both a one-year and five-year timetable and is submitted to the Board annually. It includes estimated costs, methods of financing such costs and year of proposed construction. The Board holds public hearings on the program and after the hearings adopts or modifies and adopts the one-year capital improvements program and generally approves the five-year program. All projects expected to be commenced within the five year timetable are prioritized by MSD using a points system and methodology generally approved by the County. The priority system is based on relative needs and importance of each improvement, and the time required for planning, design and easement acquisition. Additionally, the position of regulatory authorities influence the priority of projects. Approval of the Capital Improvements Plan does not represent approval of the design or construction of any specific project included in the Capital Improvement Plan. Each such project is separately approved by the Board after a public hearing is held on each project. After such hearing, the Board makes a decision on whether to proceed with the project, and if so, how it will be financed.

Although management of MSD believes the estimates to be reasonably accurate, actual construction costs may vary from the estimates approved due to a variety of factors, including changes in



business conditions, environmental requirements, government regulation, design changes, equipment delivery schedules and the cost of labor, equipment and material.

Pursuant to applicable Ohio law, prior to the issuance of public obligations for non-special assessment Sewer System projects (including general obligation and revenue securities), the County must undertake certain preliminary steps which include, without limitation, preparation of a general plan of sewerage and a declaration of its necessity, as well as the preparation and approval of detailed plans, specifications and an estimate of cost. Subsequently, the County may, by resolution, including a resolution authorizing the issuance or incurrence of public obligations for a particular improvement, authorize an improvement and the expenditure of funds required for its acquisition or construction, and may proceed with the improvement without regard to the procedure otherwise required for special assessment projects under Chapter 6117 of the Ohio Revised Code. Prior to the issuance of special assessment public obligations for Sewer System purposes, the County must follow more detailed procedural steps in comparison to non-special assessment Sewer System projects. Ohio law, thus, inhibits borrowing portions of the Capital Improvement Program currently even though the expenditures are scheduled and the amounts are generally foreseeable. These procedural steps include, without limitation, the preparation and approval of detailed plans, specifications and an estimate of cost, passage of a resolution of necessity, notice to property owners, a public hearing, passage of a resolution to proceed and objection periods. Projects which have not completed all steps required prior to public obligation financing are not included in this financing and will be funded separately, either with MSD funds in the Replacement and Improvement Account or Surplus Account or by other future borrowing, or a combination thereof.

Pursuant to the Trust Agreement, and subject to the conditions thereof, the County may issue Additional Bonds in addition to the 2003 Bonds for any lawful purpose, including, but not limited to, refunding any one or more series of bonds, any claims settlement, and making improvements to the Sewer System. Additional Bonds of any series shall be issued on a parity, and shall be equally and ratably secured by the Pledged Revenues and the Revenue Fund, with the 1991 Bonds, the 1993 Bonds, the 1995 Bonds, the 1997 Bonds, the 2000 Bonds, the 2001 Bonds, the 2003 Bonds and each other series of Additional Bonds. (See "SUMMARY OF CERTAIN PROVISIONS OF THE 2003 AND PRIOR BOND LEGISLATION AND THE TRUST AGREEMENT - Additional Bonds").

#### Capital Improvement Program 2003-2007

The Capital Improvement Program for the years 2003-2007 contemplates total capital expenditures of approximately \$362,425,130 including the design phase of certain projects, the construction of which will occur beyond the five year planning horizon of the Program. Of the \$362,425,130 amount actually anticipated to be spent or encumbered, approximately \$280,000,000 (77%) is allocated to improvement to the collection system, including approximately \$49,368,000 (13.6%) for CSO improvements, and \$78,994,000 (21.8%) for SSO improvements, and \$82,110,000 (22.6%) is allocated to projects related to upgrading and improving the treatment plants. While these amounts represent MSD's current best estimate, which projects are actually constructed and when such construction occurs are subject to a variety of factors, including a project-by-project determination by the County.

The Capital Improvement Program for the years 2003-2007 adopted by the County in December, 2002, represents the increasing emphasis of MSD on eliminating sanitary sewer overflow, mitigating combined sewer overflows and replacing or rehabilitating sewer lines, improving the capacity of the sewer lines, and providing new sewers. The Fiscal Year 2003 Capital Improvement Program budget is \$73,797,481. Of this, \$400,000 relates to CSO improvements, and \$19,912,000 to SSO improvement.

MSD continues to work on a large number of longer term projects approved as part of the Capital Improvement Program budget cycle.

#### Future Financings

In conjunction with reviewing MSD's annual Capital Improvement Programs, the County projects its financing needs based upon estimated rates, account balances, cash flows, timing and costs of anticipated capital improvements and other factors, including amounts previously spent or encumbered on long term construction contracts. As part of the approval the 2003 Capital Improvement Program, the County projected that during the period from 2003 to 2007 it would need to generate approximately \$362,425,000 for capital projects. This estimate assumed no revisions, major additions or major deletions to the current projects contained in the 2003-2007 Capital Improvement Program. The County has considerable flexibility in determining the projects to be approved, their timing, priority and funding. Of the estimated \$362,425,000 needed, the County anticipated internally generating approximately \$45,000,000 with the balance of \$317,425,000 being financed externally through borrowings. It is anticipated that approximately \$60,000,000 would be borrowed in 2003, approximately \$71,000,000 in 2004 and approximately \$186,425,000 in 2005-2007.

#### Customers and Billing

Residential customers are primarily billed on a quarterly cycle. Customers with larger meters are billed primarily on a monthly cycle. Most bills sent to MSD customers are for both water and sewer service and are sent by the water provider for that customer. The water provider, as billing agent, receives the payment and forwards the appropriate portion to MSD. The Cincinnati Water Works provides water service to residences and businesses in essentially the same service area as MSD. Consequently, the Cincinnati Water Works bills approximately 90 percent of the District's wastewater customers with the remaining 10 percent billed by some nine different political subdivisions in the County.

The bills processed by Cincinnati Water Works are collected by the City of Cincinnati. Pursuant to procedures established by MSD, if payment is not received from the customer within thirty days, reminder letters are sent. If payment is not received within sixty days, a follow-up letter assessing a penalty is sent. After a series of further reminder letters, the matter is referred to the City Treasurer for collection. If payment has not been received within the appropriate period, Cincinnati Water Works may shut off the water service. Additionally, pursuant to Ohio statute, it is possible for a delinquent sewer service bill to be certified as a lien on the real estate. The lien takes effect only on the date that it is certified and is only certified if the current owner of the real estate is obligated on the bill. In excess of 98% of the statements are paid within ninety days. Approximately three-tenths of one percent of MSD receivables are written off as bad debts.

The eight municipalities which process their own bills are responsible for all collection of such amounts. With the exception of the municipality of Loveland, such municipalities are allowed collection expense of 7% (including an estimate of approximately one-third of 1% for bad debts) of the total amount billed and remit the net amount (93% of the amount billed) to MSD on a quarterly basis.

The Cincinnati Water Works classifies all customers as residential or non-residential and further classifies the non-residential customers by Standard Industrial Classification Codes. This data correlates well with meter size, with the smallest meters being generally residential customers and the larger meters being commercial and industrial customers. The remaining 10% of the customers who have their water service and bills provided by municipalities other than Cincinnati Water Works are not directly classified. However, MSD estimates their classification based on meter size.

The number of residential, commercial, and industrial customer classes served, billable wastewater flow and average usage per account for the years 1999 through 2002, inclusive, is indicated in the table below.

#### NUMBER OF ACCOUNTS AND WASTEWATER FLOW

<u>Year</u>	<u>Residential Accounts</u>	<u>Commercial &amp; Industrial Accounts</u>	<u>Total Accounts</u>	<u>Billable Wastewater Flow in Ccf</u>	<u>Average Usage Per Account Ccf/Acct.</u>
1999	199,786	22,254	222,040	45,251,900	203.8
2000	201,720	21,931	223,691	44,892,086	200.7
2001	202,387	22,299	224,686	43,005,646	191.4
2002	202,597	22,198	224,795	43,149,497	192.0

The above data has been estimated by MSD based upon data obtained from the Cincinnati Water Works, and adjusted for accounts not serviced by Cincinnati Water Works. Due to changes in the computer systems and timing, the 1998 account data was estimated using past history and trends and is omitted.

During 2002, the ten largest sewer users in the area serviced by MSD are listed below:

	<u>Customer</u>	<u>Product of Services</u>	<u>Percent of Sewer Revenues (Not Including Surcharges)</u>
1.	Procter & Gamble, Ivorydale	Consumer products	1.47%
2.	Cognis-Henkel-Emery	Chemicals; distillery	1.15
3.	Sun Chemical	Chemicals	.74
4.	CDR Pigments & Dispersions (Division of Flint, Inc.)	Pigments	.45
5.	General Electric	Aircraft engines	.44
6.	John Morrell Meats	Food processing and packaging;	.43
7.	PMC-Specialty Group	Chemicals	.43
8.	Wornick	Food packaging	.36
9.	Davidson Chemicals	Chemicals	.34
10.	Hilton Davis Chemical Co./BF Goodrich	Chemicals	.29
	<b>Total</b>		<b>6.10%</b>

#### Employees and Payroll

In 2002 MSD had 631 employees and had payroll and related benefits costs of \$37,916,000. A portion of this expense principally related to project engineering is capitalized.

Approximately 68% of MSD employees are members of various locals of the American Federation of State, County and Municipal Employees with a contract which expires in August, 2004. MSD considers its labor relates generally to be good.

With the exception of a very small number of employees who were formerly employed by the County or other agencies of the State, all employees of MSD are participants in the City of Cincinnati's retirement system. Both the employee and the City contribute to the funding of these plans. Empl

who participate in the Cincinnati retirement system contribute 7% of their gross pay to the system. Other employees contribute 8½% of their gross pay to the Public Employees Retirement System.

MSD provides health care coverage, including Anthem Community Choice, Community Preferred and Anthem 100 (HMO). These benefits are generally paid fully by MSD with the exception of Anthem 100 employees who pay the difference between the HMO cost and the City's cost for Anthem Plans.

### **Insurance**

The Trust Agreement obligates the County to insure the property and equipment comprising the Sewer System. The County must also carry or cause to be carried general liability insurance. Historically, the City as the operator of MSD has obtained the general liability insurance. All insurance must be reviewed at least once every three years by an insurance consultant or independent engineer and the County must promptly effectuate such changes as may be recommended. The Board, with the review of an insurance consultant, may elect to self-insure. The Trust Agreement provides that, if the County determines in good faith that any required insurance is not commercially available at a reasonable cost with reasonable terms, it shall so certify to the Trustee and advise the Trustee that it proposes to engage an insurance consultant to verify the determination and to make recommendations regarding the types, amounts and provisions of any such insurance that should be purchased or funded by the County, taking into consideration the costs and practices of other municipal sewer systems of similar size and type in the State to the extent that such information is available. The County may, upon resolution adopted in good faith and upon the recommendations of the insurance consultant, adopt alternate or supplemental risk management programs which the County determines to be reasonable, including the right to self-insure and participate in captive insurance companies.

The County currently carries property insurance pursuant to an all-risk policy on MSD's buildings and equipment in the amount of \$651,064,000. Such insurance has a \$250,000 per loss deductible and does not insure the Sewer System's underground sewer lines. The amount of the insurance carried is based upon the replacement cost of the Sewer System's building and equipment.

Since 1986, the City, as the operator of MSD, has determined that, in view of the City's sovereign immunity under Ohio law, it is not cost effective to maintain general public liability insurance. Unless the City procures insurance or initiates a program of funded self-insurance, any judgment against MSD would have to be paid out of operating revenues or other funds of the Sewer System. Pursuant to the Trust Agreement, the County may issue Additional Bonds to pay any settlement of or final judgment against MSD.

### **Sewer Rates**

The Ohio Revised Code generally requires counties to establish reasonable rates which must be at least sufficient to pay all the costs of operation and maintenance and debt service for all revenue bonds of sewer systems. Additionally, pursuant to numerous Cooperative Agreements for Construction, Maintenance and Operation of Wastewater Facilities between the County and the Ohio Water Development Authority, the County is required to establish and maintain rates resulting in revenues at least adequate to meet operation and maintenance and amortize all long-term debt. Since the consolidation in 1968, MSD has established rates sufficient to cover MSD's operation and maintenance costs and pay all debt service on its obligations.

The sewer charges consist of a minimum charge and a commodity charge. The minimum charge is based on water meter size or the size of the premises (based on the number of family units) whichever

results in the larger minimum charge. Effective January 9, 2003, the minimum charge rates were as follows:

#### SEWER RATES

<u>MONTHLY BILLS</u>			<u>QUARTERLY BILLS</u>		
<u>Meter Size (Inches)</u>	<u>Number of Family Units</u>	<u>Minimum Rate</u>	<u>Meter Size (Inches)</u>	<u>Number of Family Units</u>	<u>Minimum Rate</u>
5/8	1	\$ 20.66	5/8	1	\$ 42.47
¾	2-3	24.79	¾	2-3	54.76
1	4-5	31.90	1	4-5	75.08
1 ½	6-12	49.18	1 ½	6-12	127.58
2	13-20	67.78	2	13-20	180.72
3	21-50	166.12	3	21-50	463.78
4	51-115	275.09	4	51-115	768.09
6	116-200	538.20	6	116-200	1,517.58
8	Over 250	799.99	8	Over 250	2,264.42
10		1,075.07	10		3,025.87
12		1,251.80	12		3,493.65

The commodity charge is based on the quantity of water used and is as follows:

For monthly bills, for each 100 cubic feet consumed per month in excess of 500 cubic feet, but not in excess of 5,000 cubic feet, the commodity charge is \$2.127 per 100 cubic feet. For each 100 cubic feet consumed per month in excess of 5,000 cubic feet, the commodity charge is \$1.701 per 100 cubic feet.

For quarterly bills, for each 100 cubic feet consumed per quarter in excess of 900 cubic feet not in excess of 15,000 cubic feet, the commodity charge is \$2.127 per 100 cubic feet. For each 100 cubic feet consumed per quarter in excess of 15,000 cubic feet, the commodity charge is \$1.701 per 100 cubic feet.

MSD estimates that the average quarterly bill for a residential household is approximately \$87.14 based on average consumption of 30 ccf. The average quarterly water bill based on the same consumption is approximately \$48.23 in the City and \$61.69 in the County, resulting in combined bills of approximately \$135.37 and \$148.83, respectively.

Sewer rates are designed to meet average conditions for groups of customers having similar service requirements. MSD periodically reviews the adequacy of its rate structure to generate sufficient revenues for its operating and capital requirements and engages the services of an independent consultant to advise it. Adjustments to sewer rates are based upon the cost of service from the customer classes served and MSD's overall level of revenue requirements. Since 1985, the County has increased sewer rates eleven times as indicated in the table below. The rate increases do not translate directly to an increase in revenues due to a variety of factors, including that certain of the rate increases were by usage category versus across the board, variances in consumption by user type, rate increases being implemented mid-year and lags in billing and collection.



<u>Year</u>	<u>Approximate Composite Rate Increase Over Previous Effective Rates</u>
1985	21%
1987	17%
1989	11%
1991	18%
1993	20%
1995	6%
1996	4%
2000	9 ½ %
2001	7%
2002	6%
2003	7%

In connection with the Prior Bonds, the County has covenanted to charge such rates and charges for the services and facilities of the Sewer System as shall at all times produce revenues sufficient to meet the requirement set forth under "SUMMARY OF CERTAIN PROVISIONS OF THE 2003 AND PRIOR BOND LEGISLATION AND THE TRUST AGREEMENT - Rate Covenant". Pursuant to the Trust Agreement, the Sewer System rates and charges must be sufficient to produce Net Income Available for Debt Service adequate to meet the reasonable expenses of operation and maintenance, the debt service requirements of the Bond Legislation, including certain reserves, and to assure the normal growth and sound operation of the Sewer System. Failure to do so can be an event of default if remedial action is not taken.

#### **Operating Budget**

For budgetary purposes, MSD operates on a cash basis encumbrance accounting system. MSD is organized into five operating divisions; each division is comprised of various sections which represent operating units. The operating and capital budgets are products of total management involvement down to the section level of the organization.

The operating budget for each division is prepared by the section heads, reviewed by the respective division head and consolidated into a division budget request, which is reviewed by the Director of Sewers. The presentation of the budget compares, on a division level, the previous year's budget to the previous year's actual experience and compares the previous year's actual experience to the requested budget. Any significant increases or decreases in either analysis are noted and explained. Once the budget is satisfactory to MSD, it is reviewed by the City Manager who forwards it, along with his recommendation to City Council. Pursuant to the 1997 MSD Supplemental Agreement, the City and County agreed that prior to August 15 of each year a tentative annual operating budget prepared by the City would be submitted to the County, followed by an annual operating budget approved by City Council no later than September 15 of each year. The County has the authority to amend, modify or supplement the proposed operating budget submitted by the City, but not so as to impair the ability of either the City or County to perform their obligations pursuant to the MSD Agreement or the Trust Agreement. The County has the responsibility to pass the appropriation resolution and final operating budget, which the City follows in operating MSD pursuant to the MSD Agreement.

In 1997, the City and County entered into the 1997 MSD Supplemental Agreement, which clarifies the respective roles of the City and County regarding the operating budget. The 1997 MSD Supplemental Agreement establishes a procedure (including advice of an outside consultant) to reach agreement on a new formula for the charging of indirect costs by the City and County with respect to budgeting and allocation of indirect costs. The new formula was used in 1998 and subsequent years. The

City and the County also agreed in the 1997 MSD Supplemental Agreement that any disagreement over indirect costs will not justify termination of the MSD Agreement.

The operating budget for 2003 was adopted by the Board on December 30, 2002. The authorizes cash expenditures of approximately \$129,459,680. Because the operating budget is a cash budget, it includes certain expenditures, which will be capitalized on a generally accepted accounting principle basis and does not include depreciation.

#### Summary of Historical Financial Information

The historical portion of the following summary was prepared by MSD from its records for the years January 1, 1998 through December 31, 2002, including for the year 1998-2002, inclusive, its audited financial reports for such time. It reflects the operations of the Sewer System on an accrual accounting basis. The management of MSD states that there have been no material adverse changes in the financial condition of MSD from that stated in the audited financial statements for the year ending December 31, 2002. These summaries should be read in conjunction with the related financial statements included as Appendix A.

#### Selected Historical Financial Information (In Thousands)

##### OPERATIONS FOR YEARS ENDED DECEMBER 31

	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
Operating Revenue:					
Sewerage service charges	\$ 89,837	\$ 90,283	\$ 94,441	\$101,634	\$107,800
Sewerage surcharges	10,128	9,471	11,403	9,716	10
Other revenues	<u>2,889</u>	<u>3,168</u>	<u>2,228</u>	<u>2,759</u>	<u>—</u>
Total operating revenues	<u>102,854</u>	<u>102,922</u>	<u>108,072</u>	<u>114,109</u>	<u>121,810</u>
Operating Expenses:					
Personnel services	34,246	31,821	32,605	33,351	35,244
Utilities, fuel & supplies	13,114	13,327	14,820	15,807	15,506
Depreciation & amortization	25,096	25,435	26,266	27,212	27,271
Purchased services	15,656	14,342	15,528	15,823	18,814
Other expenses	<u>3,589</u>	<u>3,889</u>	<u>4,554</u>	<u>5,331</u>	<u>5,872</u>
Total operating expenses	<u>91,701</u>	<u>88,814</u>	<u>93,773</u>	<u>97,524</u>	<u>102,707</u>
Income from operations	<u>11,153</u>	<u>14,108</u>	<u>14,299</u>	<u>16,585</u>	<u>18,740</u>
Other Income (Expenses):					
Interest income	9,083	5,929	6,592	7,930	4,861
Net change in fair value of investments	1,475	(3,887)	3,816	(723)	2,493
Property disposals (gain/loss)	<u>41</u>	<u>63</u>	<u>55</u>	<u>72</u>	<u>95</u>
Total other income	<u>10,599</u>	<u>2,105</u>	<u>10,463</u>	<u>7,279</u>	<u>7,449</u>
Interest expense	<u>18,136</u>	<u>16,405</u>	<u>17,173</u>	<u>19,525</u>	<u>21,745</u>
Net income (loss) from operations	<u>\$ 3,616</u>	<u>\$ (192)</u>	<u>\$ 7,589</u>	<u>\$ 4,339</u>	<u>\$ 4,444</u>

**Selected Historical Financial Information**  
(In Thousands)

**CASH AND INVESTMENTS**  
As of December 31

	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
<b>Current Assets:</b>					
Cash, cash equivalents and pooled investments	<u>\$11,108</u>	<u>\$10,293</u>	<u>\$11,239</u>	<u>\$11,869</u>	<u>\$12,782</u>
<b>Restricted Assets</b>					
Held by City of Cincinnati:	\$5,062	\$10,735	\$2,990	\$ 4,247	\$9,947
Construction account					
Amount to be transferred to Surplus Account	9,824	10,544	10,304	10,539	6,371
Held by Trustee:					
Reserve account	35,551	30,138	39,793	41,933	44,037
Replacement and improvement account	4,972	4,994	5,099	5,109	5,004
Bond account	3,129	2,978	3,665	3,736	3,399
Surplus Account	<u>96,814</u>	<u>47,088</u>	<u>69,863</u>	<u>114,513</u>	<u>93,631</u>
Total restricted assets	<u>\$155,352</u>	<u>\$106,477</u>	<u>\$131,714</u>	<u>\$180,077</u>	<u>\$162,389</u>
<b>Cash available for operations and capital improvements:</b>					
Cash and investments	\$11,108	\$10,293	\$11,239	\$11,869	\$12,782
Amount to be transferred to Surplus Account	9,824	10,544	10,304	10,539	6,371
Replacement and improvement account	4,972	4,994	5,099	5,109	5,004
Surplus Account	<u>96,814</u>	<u>47,088</u>	<u>69,863</u>	<u>114,513</u>	<u>93,631</u>
Total available assets	<u>\$122,718</u>	<u>\$72,919</u>	<u>\$96,505</u>	<u>\$142,030</u>	<u>\$117,788</u>

Debt Service Coverage has been computed in accordance with the provisions of the Trust Agreement. The table below shows historical coverage only and does not make proforma adjustments, such as adjusting for the issuance of the 2003 Bonds or the increase in sewer rates which was effective in January 2003.



**Selected Historical Financial Information**  
(In Thousands)

**DEBT SERVICE COVERAGE**  
**FOR YEARS ENDED DECEMBER 31**

	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
<b>Revenues</b>					
Total operating revenues	\$102,854	\$102,922	\$108,072	\$114,109	\$121,447
Ordinary interest income	9,083	5,929	6,592	7,929	4,861
Capitalized interest	1,905	1,749	1,564	1,183	487
Tap-in/connection fees	<u>4,653</u>	<u>4,416</u>	<u>4,373</u>	<u>4,486</u>	<u>4,202</u>
Total pledged revenues	118,495	115,016	120,601	127,707	130,997
<b>Total operating &amp; maintenance expenses</b>	(66,605)	(63,379)	(67,507)	(70,312)	(75,436)
Half of pledged revenue transferred to Surplus Account	<u>4,912</u>	<u>5,272</u>	<u>5,117</u>	<u>5,350</u>	<u>3,186</u>
<b>Net income available for debt service</b>	<u>\$56,802</u>	<u>\$56,909</u>	<u>\$58,211</u>	<u>\$62,745</u>	<u>\$58,747</u>
<b>Maximum annual principal and interest requirements on outstanding revenue bonds</b>	\$31,743	\$31,747	\$32,833	\$34,743	\$38,871
<b>Maximum annual principal and interest requirements on all outstanding obligations</b>	\$34,326	\$34,291	\$35,325	\$36,923	\$40,859
<b>Debt service coverage</b>					
Revenue bonds	1.79x	1.79x	1.77x	1.81x	1.51x
All obligations	1.65x	1.66x	1.65x	1.70x	1.44x

**Management Discussion of Results of Operations**

MSD maintains its financial records on a cash basis encumbrance accounting system. Annual operating and capital improvement program budgets are developed which serve as the basis of financial operations during the ensuing year. The audited financial statements are prepared on an accrual basis in accordance with generally accepted accounting principles. The amounts used in this discussion are taken directly from or were prepared by MSD using the audited statements.

In setting policy for MSD, the County Commissioners have adopted a philosophy which directs that all major capital improvements should be debt financed; and that rates should be set at a level which provides sufficient funds for operations, maintenance, routine capital improvements, debt service and repairs and improvements and which complies with all covenants set forth in the Trust Agreement.

**Overview 1998-2002**

While individual revenue and expense items fluctuate on a year-to-year basis, MSD's operating results for the five years 1998-2002 reflect the overall financial stability of the system.

Sewerage service charges have increase 20% from 1998 through 2002, which is a reflection of rate increases in 2000, 9 1/2%; 2001, 7%; and 2002, 6%. Surcharge revenue has remained somewhat constant as customers increase their environmental consciousness.

Operating Expenses net of Depreciation increased 13.3% during this five-year period. Personnel costs increase about 3%, reflecting a 4% reduction in staffing levels and modest salary increases. Active expense management helped to restrain growth in other operating costs especially those impacted by regulatory agencies.

Interest income provides a consistent source of Other Income. The results vary based on the invested balances and current interest rates which decreased considerably in 2002. Pursuant to MSD's cash basis encumbrance system, funds for construction costs are encumbered in their entirety upon execution of the contract. Interest income generated on funds held in construction accounts are transferred from these restricted assets to MSD and are available for MSD operations. In addition to interest income on construction accounts, there are also significant balances in the Reserve, Replacement and Improvement, and Surplus Accounts, which also generate investment income and are available for MSD purposes.

Overall, the periodic rate increases, expense management efforts and contribution from investment income have enabled MSD to maintain stable debt service coverage. Year 2002 was negatively impacted by a declining interest rate for investment funds and increasing costs in areas impacted by security and regulations. MSD increased rates 7% in January 2003.

A discussion of each of the last five years follows:

#### 1998

Operating revenues are getting the benefit (an increase of 1.5%) from the District's back-billing and data verification program. Surcharge revenue declined, 11%, as customers are becoming more environmentally conscious. Operating costs decreased from the preceding year reflecting reduced personnel, decreased retirement contribution rate, and reduced spending levels. The increase in interest income and debt service costs reflect having a whole year's activity after the October 1997 revenue bond issue. This year marked the implementation of Governmental Accounting Standards Board Statement No. 31 which results in stating investments at fair market value. This statement was applied to 1997, retroactively, and to 1998.

#### 1999

Overall operating revenues remained, in total, consistent with the prior year. However, the surcharge revenue continued to decrease (6.5%) reflecting continuing environmental and cost consciousness. Operating expenses decreased 4.84% (net of depreciation) from the 1998 levels reflecting continued reductions in personnel, retirement contribution rate (14% to 7%) and reduced spending levels. Interest income decreased due to the increased spending for capital projects. Interest expense was favorably impacted by capitalization of interest on construction projects. The decline in value of MSD's fixed income investments was due largely to increased interest rates.

#### 2000

Operating revenues for the year increased about 5% due in part to the first rate increase since 1996 and increased strength in surcharge effluent. This increase was partially offset by a decrease in other revenues, which fluctuates due to events and occurrences. Operating expenses increased about 5.5% and followed trends. Personnel Services increased about 2.5% and was in line with pay increases. Utility costs, especially natural gas, increased significantly (60%) during the year, which resulted in an 11% increase in this category. Purchased services increased about 8% reflecting increased services and inflationary factors. Other expenses increased \$655,000 or about 17% due to an increase in street work,

facility repairs, and mapping costs. The impact of the June bond sale was reflected in increases in interest income and interest expense. The decline in interest rates produced an increase in the fair market value of investments, which nearly matched the lost valuation in 1999.

## 2001

Operating revenues for the year increased 5.6%. This is a reflection of a rate increase and is partially offset by a decrease in surcharge revenue, which fluctuates due to the strength of the effluent discharge and the volume being generated. Overall Operating Costs increased 4%. The Personnel Services component increased 2.3% and was in line with pay increases. Utilities, fuel and supplies increased 6.7% with increases in chemical costs, supplies and parts leading the way. Other expenses increased 17% due to increased equipment repairs, communications costs and insurance rates. Interest income increased primarily due to increased funds available for investment. A bond sale had the effect of increasing interest expense for the year.

## 2002

Operating revenues increased 6.4% over 2001. This resulted from a 6% rate increase effective January 9, 2002 and increased surcharge revenue based on discharge strengths and volume. Overall operating expenses increased 5.3%. Personnel services reflect an increase in compensation, compensated absences, healthcare insurance premiums, and retirements. While purchased services reflect increases in billing costs, sewer repairs, security costs, regulatory negotiations, rate study, and various engineering and environmental studies. Other operating costs increased due to higher insurance premiums, software licensing costs, operating system costs and equipment repair. Interest expense increased as the full impact of the November 2001 debt issuance was realized. Interest income was adversely affected by the steady decrease in interest rates.

## THE COUNTY

The County is situated in the extreme southwest corner of the State and covers an area of approximately 414 square miles. Within the County are 37 municipalities: Cincinnati and 19 other cities and 17 villages. The County is the third largest in the State of Ohio in terms of population. As of January 1, 2003, the total assessed valuation of property subject to ad valorem taxes levied by Hamilton County was approximately \$18.886 billion.

The County is situated in the middle of a metropolitan area consisting of the following counties: Hamilton, Butler, Warren, Clermont and Brown in Ohio, Dearborn and Ohio in Indiana, and Kenton, Campbell, Gallatin, Grant, Pendleton and Boone in Kentucky ("Cincinnati Metropolitan Statistical Area" ("CMSA")). Based on 2000 census data, the population of the metropolitan area is approximately 1,979,000.

A transportation and industrial center since the early development of the territory west of the Appalachians, the CMSA has developed into a major center for insurance and finance companies; wholesaling and retailing; government installation, medical services, and service industries as well as manufacturing. Among the Metropolitan Area's more prominent manufacturing groups are transportation equipment, which includes aircraft engines and motor vehicle parts; food and kindred products; metal working and general industrial machinery; chemicals; fabricated metal products; and printing and publishing. This diverse economic base continues to be a source of stability for the area, protecting it from severe peaks and valleys in the business cycle. Total wage and salary employment in the County was estimated at 602,622 in 2001 by the U.S. Department of Commerce's Bureau of Economic Analysis.

Hamilton County is home to over 58% of all regional jobs, and to approximately 25,000 business and industry establishments.

Fifty-four per cent (54%) of the U.S. population is within one hour's flight time and the Metropolitan Area is within 600 miles of 53% of the nation's purchasing power and 54% of the nation's manufacturing establishments. The corporate headquarters of numerous firms are located in the Metropolitan Area. Cincinnati is the home of several Fortune 500 corporations including Procter & Gamble, The Kroger Company, Cinergy, American Financial Corporation, Federated Department Stores, Ashland, Inc., Fifth Third Bancorp, and AK Steel. The national headquarters for Sara Lee Foods and the North American headquarters for Lenscrafters are also located in the area. The Metropolitan Area is a growing center for international business with approximately 1,000 firms engaged in international trade. Metropolitan Area companies generated sales of approximately \$6.7 billion to customers outside of the U.S. in 1999. Major export products include jet engines, plastics, machinery, computer software, paper, and consumer goods. Directly imported products annually amount to over \$2 billion. Over 256 Metropolitan Area firms are owned by foreign firms from Japan, England, Western Europe, and Canada. Businesses can reduce their international business costs through duty, tax, and operational savings resulting from the Foreign Trade Zone status available in the Metropolitan Area.

The County is also the location of major federal government installations, including a regional postal service center, a U.S. Environmental Protection Agency Research Center, the Occupational Health and Safety Research Centers, a Food and Drug Administration Office and Forensic Chemistry Center, the District Court for the Southern District of Ohio and the Sixth Circuit Court of Appeals.

The vitality of the Metropolitan Area begins at the riverfront in downtown Cincinnati. The Great American Ballpark opened in March 2003, and is the home of the Cincinnati Reds. The Paul Brown Stadium opened in August 2000 and houses the Cincinnati Bengals. The 22 acre Sawyer Point Park site is a key open space in the link between the downtown and the river. The City and the County have reinstituted the Port Authority to oversee the continued development of the riverfront area. The riverfront development plan known as "The Banks" includes residential housing, retail and office space, pedestrian plazas, and additional green spaces and amenities.

There are approximately 12.8 million net square feet of office space in the downtown area and 23.3 million net square feet in suburban office buildings and parks. There is approximately 233.4 million square feet of industrial space and 30 million square feet of retail space (1.6 million square feet downtown) in the area. The estimated retail sales for 2001 in Hamilton County topped \$12.6 billion and sales surpassed \$26.0 billion for the entire Cincinnati Metropolitan Statistical Area (CMSA).

The downtown area is home to the Cincinnati Convention Center. The Convention Center has 162,000 total square feet of exhibit space and 52,000 square feet of meeting room space. The third floor includes a 30,000-square foot ballroom. A 56,500 square foot expansion of exhibit/meeting/ballroom space is currently in design. Construction of the \$160 million project will begin in 2004 and open in 2006. Sharonville, in northeastern Hamilton County, is home to the 28,000 square foot Sharonville Convention Center. The Northern Kentucky Convention Center, in the City of Covington, Kentucky, offers 110,000 square feet of conference space. There are over 20,000 hotel and motel rooms in the CMSA area.

Cincinnati's Central Business District (the "CBD") is a full scale regional office center. In the past fifteen years, the construction of new office buildings has been a major catalyst for new job growth and tax revenue generation. In order to support the CBD's office, retail and entertainment facilities the downtown area has benefited from several new market rate housing projects.

Several projects aimed at improving the quality of life for the residents of the County have been completed in the last few years, including the Children's Museum of Cincinnati; the Fountain Square West project has tenants such as Lazarus, Tiffany's, Brooks Brothers, and Palominos Restaurant; Newport on the Levee entertainment complex, including the Newport Aquarium and numerous restaurants and retail stores is housed within a 15 acre site in Newport, Kentucky. The recently opened Lois and Richard Rosenthal Center for Contemporary Art and the Cincinnati Wing of the Cincinnati Art Museum enhance the cultural attractions of the area. The reconstruction of Fort Washington Way (the freeway artery that separates the CBD from the CRF) was completed in 2001. Recent investments still underway include: the City's \$13 million renovation and expansion of Findlay Market, the redevelopment of the Central Riverfront (the "CRF"), and the \$80 million National Underground Railroad Freedom Center, currently under construction with plans to open in mid-year 2004. In response to the current development of both the Cincinnati and Northern Kentucky riverfronts, the Transit Authority of Northern Kentucky has added a shuttle service linking the two riverfronts serving all entertainment and restaurant districts in downtown Cincinnati, Covington, Newport and Bellevue.

To further attract a diverse group of retailers to the Cincinnati downtown area and revitalize the CBD, Downtown Cincinnati, Inc. ("DCI") was formed. To support DCI's goals, in September 1997 the City of Cincinnati approved a Special Improvement District bounded generally by the Ohio River to the South, Central Parkway to the north, Central Avenue to the west and Eggleston Avenue to the east. The City passed an ordinance in the fall of 2001 to re-establish this district following a successful property owner petition. The boundaries of the SID were amended to exclude the two County owned stadiums on the riverfront. Special Improvement assessments begun January 1, 2002 will continue for four more years.

The three member Board of County Commissioners is the primary legislative and executive body of the County. The County Commissioners are elected at large in even numbered years for four-year overlapping terms. The current County Commissioners consist of John Dowlin, Philip Heimlich and Todd Portune.

#### **SUMMARY OF CERTAIN PROVISIONS OF THE 2003 AND PRIOR BOND LEGISLATION AND THE TRUST AGREEMENT**

Following is a summary of certain provisions of the Trust Agreement between and among US Bank, National Association (formerly known as Firststar Bank, National Association and Star Bank, National Association), as Trustee, the County, and for certain limited purposes, the City as supplemented by the Supplemental Trust Agreements. The Prior and 2003 Bond Legislation is incorporated into and constitutes an integral part of the Trust Agreement, as supplemented. This summary is not to be regarded as a complete statement of the 2001 and Prior Bond Legislation, the Trust Agreement, or the Supplemental Trust Agreements, to which reference is made for a full statement of terms thereof. Copies of the 1985, 1986, 1991, 1993, 1995, 1997, 2000, 2001 and 2003 Bond Legislation, the Trust Agreement and Supplemental Trust Agreements are on file with the Trustee.

#### **Creation of Trust**

Pursuant to the Trust Agreement, the County pledges the Pledged Revenues, after provision only for the reasonable expenses of the operation and maintenance of the Sewer System, and any funds in the Revenue Fund as security for the performance of its obligations thereunder.



### Establishment, Application and Investment of Funds and Accounts

The Trust Agreement, as supplemented, establishes a number of funds and accounts, many of which relate to Prior Bonds and the projects and improvements funded with such Prior Bonds. Among the funds and accounts most relevant to the 2003 Bonds are the following:

- (1) the Revenue Fund, consisting of (i) the Bond Account, including the Interest, Principal and Sinking Fund Subaccounts thereof, (ii) the Reserve Account, (iii) the Replacement and Improvement Account, and (iv) the Surplus Account
- (2) the 2003 Expense Account, and
- (3) the Rebate Fund.

All proceeds from the Prior Bonds have been spent on the 1985, 1986, 1991, 1993, 1995, 1997, 2000 and 2001 projects.

The Bond Account and Reserve Account shall be used solely for the payments of the principal of and premium, if any, and interest on the outstanding 2003 and Prior Bonds (other than the Refunded Bonds), and, to the extent provided in the Bond Legislation, for the redemption, and the purchase for retirement, of the outstanding 2003 and Prior Bonds.

The Replacement and Improvement Account shall be used for replacements of, or improvements to, the Sewer System, as directed by the Director of MSD, and to the extent funds are not available in the Bond Account and the Reserve Account, may be used for the payment of the principal of and interest on the outstanding 2003 and Prior Bonds. Additionally, moneys on deposit in the Replacement and Improvement Account may be used to purchase Bonds in the open market in lieu of mandatory redemption. Unless there has been a default in the payment of principal of or interest on any Bonds outstanding under the Trust Agreement or unless the Bond Account is not at the required balance, the Trustee shall pay any amount requisitioned on the Replacement and Improvement Account by the City Finance Director.

The Surplus Account shall, to the extent necessary, from time to time be transferred to the Bond Account or the Reserve Account to permit the payment of all obligations payable from such accounts, and otherwise may be used for any other Sewer System purpose, including debt service payments on general obligation debt of the County and payment of Obligations under Ohio Water Development Authority Cooperative Agreements. Unless there has been a default in the payment of principal of or interest on any Bonds outstanding under the Trust Agreement, the Trustee shall pay any amount requisitioned on the Surplus Account by the City Finance Director.

The 2003 Expense Account is held by the Trustee and shall be disbursed as necessary to pay for costs of issuance of the 2003 Bonds. Any balance in the 2003 Expense Account six months after the delivery of the final series of the Series 2003 Bonds shall be transferred by the Trustee to the Bond Account and treated as a credit against payments of principal and interest on the 2003 Bonds.

The Rebate Fund is a special rebate fund maintained in the custody of the Trustee. Deposits shall be made to the 2003 Rebate Fund by the County as directed by Bond Counsel in order to comply with applicable arbitrage requirements under the Internal Revenue Code of 1986, as amended.

Until required for the foregoing purposes, moneys in the Bond Account, the Reserve Account, the Replacement and Improvement Account, the Surplus Account and the 2003 Expense Account shall, when

paid and as directed by the Authorized Officer of the County in writing or by oral instruction confirmed promptly in writing, be invested in Eligible Investments, provided that moneys in the Surplus Account may also be invested in the Bonds.

A Reserve Account Guaranty issued to the Trustee by a financial institution may be deposited in the Reserve Account to satisfy all or a portion of the Bond Reserve Requirement if the issuer of the obligation is rated at least "Aaa" by Moody's Investors Service and "AAA" by Standard & Poor's Corporation if the Reserve Account Guaranty is a surety bond or insurance policy, or at least "AA" by Standard & Poor's Corporation, if the Reserve Account Guaranty is an unconditional irrevocable letter of credit. If the Reserve Account Guaranty is an unconditional letter of credit, it shall be for a term of at least three years, and shall require the Reserve Account Guarantor to provide the County at least thirty months notice of the Reserve Account Guaranty's expiration. The delivery of a Reserve Account Guaranty is subject to a number of preconditions set forth in the Bond Legislation.

The Reserve Account Guaranty Agreement pertaining to each Reserve Account Guaranty shall provide that the obligation to reimburse the Reserve Account Guarantor for any fees or expenses or claims or draws upon the Reserve Account Guaranty shall be subordinate to the payments required to be made to the Bond Account and, subject to certain conditions described in the Bond Legislation, on a parity with the cash replenishment of the Reserve Account.

In the event that the rating of the Reserve Account Guarantor falls below either of the ratings required by either of the rating agencies specified above, or the Reserve Account Guarantor defaults in its payment obligations under the Reserve Account Guaranty, or the Reserve Account Guarantor becomes insolvent, the County shall either (a) deposit into the Reserve Account moneys sufficient to satisfy the Bond Reserve Requirement, not taking into account the stated amount of the non-qualifying Reserve Account Guaranty, which moneys shall be deposited in equal monthly installments over the ensuing two years, or (b) within six months of the reduction in rating, provide a replacement Reserve Account Guaranty.

If, as the result of the provision of a Reserve Account Guaranty, the amount contained in the Reserve Account, including the Reserve Account Guaranty Coverage, exceeds the Bond Reserve Requirement, such excess consisting of money shall be transferred from the Reserve Account to the credit of either the Bond Account or a construction fund, as directed in writing to the Trustee by the County.

#### **Deposit and Disposition of Pledged Revenues**

The City shall transfer to the Trustee or the County, as the case may be, from Pledged Revenues, on the 15th day of each month, the following payments in the following order:

(1) First, upon written notice by the Trustee to the City, the City shall transmit for deposit into the Interest Subaccount of the Bond Account, an amount, to the extent not otherwise available from moneys in the Bond Account, equal to at least 1/6 of the interest payable on the Bonds on the next Interest Payment Date;

(2) Second, upon written notice by the Trustee to the City, the City shall transmit for deposit into the Principal or Sinking Fund Subaccount of the Bond Account an amount, to the extent not otherwise available from moneys in the Bond Account, equal to at least 1/12 of the principal amount of Bonds maturing or subject to mandatory sinking fund redemption in the next Bond Year, provided, however, that to the extent that the County in any given calendar year, retires an amount of 2003 Bonds greater than that required by the mandatory sinking fund requirements, then the payments required